



# MATH

# 6

FOR FAMILIES

**YOU ARE** your child's first teacher. Learn how to support the goals of Oklahoma's academic standards and why they are important for your child. Please be in regular communication with your child's teachers and ask how you can support math learning at home. When schools and families work together as partners, it helps your child achieve academic excellence!

## SIXTH GRADE

### What to expect:

In sixth grade, the mathematical skills and understanding your child is developing will be key foundations for college and career readiness. These include working with ratios and rates and with the building blocks for algebra, variables and variable expressions.

### By the end of the school year, your child will:

- Develop fluency in addition and subtraction of whole numbers and in multiplication and division of fractions, decimals and mixed numbers.
- Make connections between real-world and mathematical problems involving ratios, area and mean, and median, mode and range.
- Take real-world situations and word problems and represent them as expressions, equations and inequalities. For example, "Clara ran 10 miles, which is twice as far as Nina ran. How far did Nina run?" can be represented by  $2x = 10$ , with  $x$  being how far Nina ran.
- Determine the likelihood or probability that events will occur. For example, if you have 12 marbles in a bag and all 12 of them are green, it is certain you will pull a green marble from the bag.

### What to do at home:

- Ask your child to look at the same item at the store in two different sizes and determine which size is the best value.
- Pick out four items for sale at a store and ask your child to calculate the mean (average) cost of the four items and how the mean changes if an item is removed.
- Show your child how fast you are driving and ask how long it will take to get home at that rate of speed if you are 20 miles away.
- Calculate how much the temperature has changed over the course of the day.
- Create story problems from real-life situations. For example, at the fair, if it costs \$5 to get in and \$1.50 per ride, how many rides can you have for \$20?



OKLAHOMA STATE DEPARTMENT OF  
**EDUCATION**  
— CHAMPION EXCELLENCE —



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### Fostering Curiosity

Children are naturally curious and want to learn about things that interest them. Since curiosity contributes to success in the classroom, it is important to encourage it at home. Provide opportunities for your child to ask questions, be creative, discover answers and explore the world.

Cultivate your child's curiosity with guiding questions like these:

- Do you think there are fake numbers? Why or why not?
- What would happen if we didn't have the number zero?
- If you could give one gift to every child in the world, what gift would you give and why?

Your child will have plenty of questions. It's okay if you don't have the answer every time. The best response is always, "Let's find out together."

### Fostering Communication

Families can play a role in helping their children learn to be good communicators by encouraging them to add new words to their vocabulary, express themselves and be good listeners. As children's communication skills grow, they are able to learn new ideas, get along with others and develop positive relationships and a strong self-image.

Cultivate your child's communication skills with questions like these:

- What goals can you set to help you become a better person?
- What is your favorite part of the year and why?
- How can you make a positive difference for someone today?

### Fostering Comprehension

Reading is a building block for success in all school subjects and a critical skill that develops with time and practice. Encourage your child to read for pleasure, and be a good role model by reading things you enjoy. Use the following questions to help sixth-graders understand what they are reading.

#### BEFORE READING

- Are you keeping a list of books you have already read? Why would it be good to keep a list like that?
- How is this book like another book you have read or a movie you have seen?
- Why did you pick this book?

#### DURING READING

- As you are reading, what questions do you have for the author?
- How does this book remind you of a book you have already read or something you already know?
- What resources can you use to understand words you aren't familiar with?

#### AFTER READING

- How did the setting of the story affect the characters and plot?
- What was the theme of the book? What lesson do you think the author wanted the reader to learn?
- How would you rewrite the ending of the story? Why would you change it?